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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/717,164	11/19/2003	Thomas Joseph Maskell	MASKELL-TJI	6757	
7590 10/19/2005			EXAMINER		
Thomas Joseph Maskell 2585 Spitler Road Poland, OH 19103			KASTLER, SCOTT R		
			ART UNIT	PAPER NUMBER	
•			1742	1742	
			DATE MAILED: 10/19/200	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
	10/717,164	MASKELL, THOMAS JOSEPH				
Office Action Summary	Examiner	Art Unit				
	Scott Kastler	1742				
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status		·				
1) Responsive to communication(s) filed on 15 August 2005.						
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closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>21-30</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>21-30</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on 19 November 2003 is/a	re: a)⊠ accepted or b)⊡ object	ed to by the Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	∍ 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	jected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ol>	Paper No(s)/Mail Da 5) Notice of Informal P	ate Patent Application (PTO-152)				
Paper No(s)/Mail Date	6) Other:	, , , , , , , , , , , , , , , , , , , ,				

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## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 21-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaBate in view of the admitted prior art of the instant disclosure. LaBate teaches a refractory article including a coating of graphite (defined by the instant specification as an electrically conductive coating) thereon (see col. 1 lines 42-53 for example) where the refractory is composed of ceramic oxides (see col. 2 lines 43-60 for example) thereby showing that it was known in the art at the time the invention was made to coat refractory articles employed in molten metal operations, including the casting and dispensing of molten metals with a graphite coating in order to reduce flaking or parting of the refractory when subjected to molten metal (see col. 1) lines 45-50 for example), thereby showing all aspects of the above claims except the specific employment of the disclosed graphite coating on a stopper rod, or the production of the stopper rod out of a refractory made of or including metallic carbides and/or graphite. The admitted prior art of the instant disclosure, on pages 1-4 for example, teaches that stopper rods used in molten metal casting or dispensing were known to be made of a refractory including metallic carbides and/or graphite at the time the invention was made. Because LaBate is specifically directed to protection of refractory products to be employed in molten metal dispensing/casting operations, motivation to include the graphite (electrically conductive) coating of LaBate, on a stopper rod

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made of either a metallic carbide or a mixture of metallic oxides, carbides and carbon as taught by the admitted prior art of the instant disclosure, in order to reduce flaking and separation of the refractory, as taught by LaBate, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

## Response to Arguments

Applicant's arguments filed on 8/15/2005 have been fully considered but they are not persuasive. Applicant's argument that the coating of LaBate is intended for a different purpose and therefore cannot render the instant claims obvious is not persuasive since as applied the proper combination of Labate and the admitted prior art of the instant disclosure teach or fairly suggest all features of the instant claims, and it has been well settled that the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

In response to applicant's request for constructive assistance in identifying allowable subject matter, it is noted that applicant's invention seems to be directed to more than simply a graphite or carbon (electrically conductive) coating on a refractory product (a stopper), but rather to such a coating on a stopper rod, where the coating forms part of a circuit connected to a control system, as described at page 12 of the instant specification and in figures 3B for example. It is noted that Labate does not show or fairly suggest connecting the disclosed electrically conductive coating to any type of circuit, since the coating of LaBate is for, as pointed out by applicant, preventing sticking or flaking.

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## Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott Kastler Primary Examiner Art Unit 1742

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